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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,812	03/30/2004	Carlos F. Navarro	074991.0102	6032

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EXAMINER

KILKENNY, PATRICK J

ART UNIT	PAPER NUMBER
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3732

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,812

Applicant(s)

NAVARRÒ ET AL.

Examiner

Patrick J. Kilkenney

Art Unit

3732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8-11,15-20 and 22-43 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) 1-6,8-11, and 15-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-9, and 15-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voudouris (US Patent No. 6,368,105) et al in view of Kurz'037 (US Patent No. 4,337,037). Voudouris et al discloses a self-ligating lingual orthodontic bracket 1 attached to the lingual surface of an upper tooth in the upper arch, comprising a base 3 with a base surface, a first flange A extending generally horizontally from the base in a lingual direction, a second flange B extending horizontally from the base in a lingual direction and separated from the first flange vertically toward the person's occlusal plane to define a transverse wire slot 5 that is exposed on a lingual side of the bracket (col. 9, line 52-col. 10, line 6; col. 10, lines 42-62; see Figure 1, and Appendix I). Voudouris et al also discloses a clip slot C formed generally vertically through the bracket, and a flexible retaining clip 20 comprising a first 22, second D, and third 21 portion (col. 9, line 62-col. 10, line 22; see Figures 1, 3 and 8, Appendix I).

The first portion 22 is positioned generally vertically within the clip slot, the second portion D extends generally horizontally from the first portion, and the third portion 21 extends generally vertically from the second portion (col. 9, line 62-col. 10,

Art Unit: 3732

line 22; see Figures 1, 3, and 8, Appendix I). The first portion of the retaining clip comprises a notch 24 (col. 10, lines 18-22; col. 12, lines 28-63; see Figures 1, 3, and 8, Appendix I). Voudouris et al discloses that the first portion of the retaining clip comprises an angled free end extending vertically out of the clip slot in a direction away from the occlusal plane (see Figures 3 and 8, and Appendix I). Voudouris et al also discloses that the third portion moves within a central slot of the second flange 12 when the retaining clip is in the open position, and is biased against the orthodontic wire when the retaining clip is in the closed position (col. 9, line 62-col. 10, line 22; col. 10, lines 42-62; see Figures 3 and 8, and Appendix I).

Voudouris et al discloses that the central portion of the second flange comprises a detent 11, that the second flange also comprises a bite plate, and that the first flange comprises a recess 6 (col. 9, line 52-col. 10, line 6; col. 10, lines 42-62; see Figure 1, and Appendix I). Voudouris et al discloses the second flange comprises a mesial and distal arm defining a central gap, the third portion of the retaining clip covers all of a lingual surface of the central portion of the second flange between its mesial and distal sides, the second flange comprises a central slot through which the third portion of the retaining clip moves, and that a lingual surface of the third portion of the retaining clip is entirely exposed (see Figures 1 and 8, and Appendix I). Voudouris et al further discloses a hook 10 extending from a side of the first flange in a direction away from the occlusal plane, and that the hook comprises a ball-shaped free end (col. 11, lines 4-10; see Figures 1 and 8, and Appendix I). Voudouris et al does not disclose that the second flange extends in the lingual direction past the first flange.

Kurz'037 teaches a lingual orthodontic bracket whose second flange A extends in the lingual direction past the first flange to provide an extended bite plate (col. 2, line 13-col. 3, line 5; see Figures 1, 2B, 3B, and 4B). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the orthodontic bracket of Voudouris et al to incorporate the teachings of Kurz'037 to create a bracket that can sustain and redirect the force from opposing teeth to prevent the brackets from being sheared off the teeth.

Regarding claims 15-23, the method of using the bracket is inherent in view of the given structure, and is therefore subject to the previously described rejections.

3. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Voudouris et al in view of Kurz, as applied to claim 1 above, and in further view of Hanson'486 (US Patent No. 5,906,486). Voudouris et al discloses the orthodontic bracket that shows the limitations as described above; however, Voudouris et al in view of Kurz, does not disclose the orthodontic wire having various cross-sectional dimensions.

Hanson'486 teaches a self-ligating orthodontic bracket wherein the wire slot and retaining clip are able to accommodate any of a plurality of orthodontic wires with different cross-sectional dimensions, including circular or rectangular (col. 5, lines 24-43; see Figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the orthodontic bracket of Voudouris et al in view of Kurz, to incorporate the teachings of Hanson'486 to create a bracket able to fit a

Art Unit: 3732

wide variety of orthodontic wires such that the dental professional may select the orthodontic wire best suited for a particular patient and their dental needs.

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Voudouris et al in view of Kurz, as applied to claim 1 above, and in further of Hanson'882 (US Patent No. 5,586,882). Voudouris et al in view of Kurz, discloses the orthodontic bracket that shows the limitations as described above; however, Voudouris et al in view of Kurz, does not disclose the second flange being continuous between the mesial and distal sides.

Hanson'882 teaches a self-ligating orthodontic bracket whose second flange is continuous between its mesial and distal sides (see Figures 1 and 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the orthodontic bracket of Voudouris et al in view of Kurz, to incorporate the teachings of Hanson'882 to create a bracket whose second flange provided a stable surface for the retaining clip to rest upon while remaining exposed.

Allowable Subject Matter

5. Claims 24-43 are allowed.

Response to Arguments

6. Applicant's arguments with respect to claims 1-6, 8-9, 10-11, 15-20, and 22-23 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Kilkenny whose telephone number is (571) 272-8684. The examiner can normally be reached on Mon-Fri, 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3732

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Patrick J. Kilkenny



CRIS L. RODRIGUEZ
PRIMARY EXAMINER